

EMBASSY ROOM

MONDAY AFTERNOON

ROOM: Embassy

TIME: Monday 1:00 PM

TITLE: Prescribed burning legislation and certification in Illinois

AUTHOR(S):

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ABSTRACT: Prescribed Burning in Illinois has long been an accepted management tool of natural resource professionals, however, the legal and liability concerns have never been defined or addressed. The Illinois Prescribed Burning Act in 2007 declared that safely conducted prescribed burns are in the public interest and are needed to properly manage land. The Act also provides limitations on liability for this burning. Under the Act, IDNR was directed to promulgate administrative rules setting standards for prescribed burn manager certification, notification procedures, burn plan standards and other factors relating to implementing a prescribed burn. The proposed administrative rules are on second reading at the Joint Committee on Administrative Rules and will be before the Committee for approval in October 2009. A detailed description of the Act and proposed rules along with planned procedures and schedules for implementation will be presented.

KEYWORDS: certification, burning, laws

ROOM: Embassy

TIME: Monday 1:20 PM

TITLE: Focusing management on hill prairies glades and bluff habitat

AUTHOR(S):

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ABSTRACT: Hill prairies and glades along river bluffs and stream systems provide essential habitat to numerous species in greatest need of conservation as identified in the Illinois Wildlife Action Plan. The prairies and adjacent woodlands along the bluffs provide important corridors for species migration and habitat connectivity. Significant loss of hill prairies has been documented using information from the Illinois Natural Areas Inventory and historic aerial photos and is primarily due to the loss of historic influences that managed succession of these communities and the current lack of adequate management. Stewardship work was being done on some of these natural communities but there was no coordinated effort to try to manage them. The Hill Prairie/Bluff Restoration Project was developed to fulfill that need. The goal is to expand hill prairie and glade habitat and improve the quality of hill prairies and their adjacent woodlands by providing much needed exotic and invasive species control and facilitating the reintroduction and use of prescribed burning. Through a grant with the U.S. Fish and Wildlife Service, IDNR has secured approximately 600,000 dollars to match with 600,000 dollars in state money and in-kind personnel time to work on both public and privately owned hill prairies in 20 counties in Illinois. Approximately 42 sites are currently being managed through this project and more will be included in the upcoming year. Management of these sites is done predominantly through an experienced vendor specializing in natural area management techniques and through IDNR and INPC staff time and effort.

KEYWORDS: hill, prairie, restoration

ROOM: Embassy

TIME: Monday 1:40 PM

TITLE: The AFWA North American conservation education strategy: increasing resources – increasing potential

AUTHOR(S):

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ABSTRACT: Effective wildlife management depends upon informed and involved citizens who understand the value of fish and wildlife resources as a public trust, understand the importance of conservation and management of those resources, accept and/or participate in wildlife related recreation, and support funding for fish and wildlife conservation. In short, effective conservation education is a critical component of wildlife management. In 2004, fish and wildlife agency directors and conservation educators met for a Conservation Education Summit. The outcome was development of a North American Conservation Education Strategy to unify and strengthen education efforts of AFWA member agencies and partners to effectively advance the North American Model of Fish and Wildlife Conservation. The Strategy includes products to support agency conservation education efforts, including a set of core concepts developed by state agency biologists and conservation educators. Strategy tools are designed to help agencies incorporate the core concepts into state education standards and in the formal school setting. Products include: Field Investigations: Using Outdoor Environments to Foster Student Learning of Scientific Processes, K-12 Conservation Education Scope and Sequence: an Educators Guide to Sequential Learning about Fish and Wildlife, and Stewardship Education Best Practices Planning Guide. This presentation will provide an overview of the Conservation Education Strategy and discuss ways for agencies to incorporate Strategy tools to enhance the effectiveness of their conservation education programs.

KEYWORDS: public, education, strategy

ROOM: Embassy

TIME: Monday 2:00 PM

TITLE: What do we know and need to know about wildlife and biofuels?

AUTHOR(S):

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ABSTRACT: Markets for the production and use of biofuels are growing and this trend has profound implications for Midwestern landscapes and wildlife. Our objectives for this talk are to review what is known about the effects of biofuels on wildlife and to identify some key questions motivated by a complex research agenda. Rapidly developing technologies, market forces, and developing agricultural policies make for many uncertainties. Nonetheless, biofuels will certainly change the availability, configuration, and value of wildlife habitats in the region. Questions include the effects of feedstock production on wildlife populations at the local and landscape scale, how market incentives for feedstock production will affect CRP and similar set aside programs, and how different harvest and management schedules will affect wildlife habitat. The need for research is urgent if reliable information is to have any influence on emerging policy and land use practices.

KEYWORDS: biofuels, habitat,

ROOM: Embassy

TIME: Monday 2:20 PM

TITLE: Analysis of the plant diversity species richness and quality assessment of pioneer cemetery natural areas in western Illinois

AUTHOR(S):

Angella Moorehouse -- Illinois Nature Preserves Commission, 2005 E Highway 136 Suite B, Carthage, IL 62321. Phone: (217)357-9522 Email: angella.moorehouse@illinois.gov

ABSTRACT: The original Illinois Natural Areas Inventory (INAI), conducted in the late 1970s, examined 3,923 pioneer cemeteries and identified 24 of these with prairie and savanna communities worthy of listing as high quality natural areas. Today there are now 30 pioneer cemeteries on the INAI, 21 of these have been permanently protected as dedicated nature preserves or registered land and water reserves. In spite of the high rate degree of protection for these prairie and savanna remnants, enormous management challenges remain as a result of the need to consider both ecological and sociological impacts on these small sites (averaging 2.2 acres) where protection of the natural and cultural heritage is essential. The ability to alter the frequency and timing of prescribed burns is rarely possible either due to concerns over damage to the tombstones or the cemetery owners' wishes to burn annually to provide better access during Memorial Day. The attitude of the cemetery owners as well as the local community greatly influences the type and extent of traditional management practices which can be implemented within the cemetery. Other factors such as lack of management resources, size of the natural area, amount of mowed access, historical grave plantings (introduced exotic plants), as well as the surrounding landscape (urban, croplands, pasture) can also have a significant impact on the long-term management of the site. This presentation will compare plant species diversity, species richness and habitat quality assessment for 13 cemetery natural areas while examining the use of adaptive management strategies to ensure the long-term sustainability of the natural communities within these cemeteries.

KEYWORDS: cemetery, management, prairie

ROOM: Embassy

TIME: Monday 2:40 PM

TITLE: Abundance - richness and diversity of frogs and toads at Big Sand Mound Nature Preserve in southeast Iowa

AUTHOR(S):

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ABSTRACT: Amphibians are declining worldwide, both in abundance and diversity. Reasons for these trends are numerous and varied. Understanding these declines is difficult due to the paucity of baseline information regarding basic population biology for many amphibian species. During this project, we assessed the abundance (number of individuals per species), richness (number of species), and diversity (relative richness among sampling sites) of anurans (i.e. frogs and toads) at the Big Sand Mound Nature Preserve located in Muscatine and Louisa Counties, Iowa. We utilized standardized field methods established by the North American Amphibian Monitoring Program. Breeding chorus surveys were conducted twice a month from April through July 2007 (8 total surveys), at 8 individual sampling sites located among the major wetland areas at this preserve. Overall, we documented 12 species of anurans. These included American Toad (*Bufo americanus*), Fowlers Toad (*Bufo fowleri*), Cricket Frog (*Acris crepitans*), Eastern Gray Treefrog (*Hyla versicolor*), Copes Gray Treefrog (*Hyla chrysoscelis*), Spring Peeper (*Pseudacris crucifer*), Western Chorus Frog (*Pseudacris triseriata*), Bullfrog (*Rana catesbeiana*), Green Frog (*Rana clamitans*), Northern Leopard Frog (*Rana pipiens*), Southern Leopard Frog (*Rana utricularia*), and Plains Leopard Frog (*Rana blairi*). Among the most abundant species were Western Chorus Frog, Eastern Gray Treefrog, and Cricket Frog, with very few Green Frogs and Spring Peepers encountered. We believe this is the first study to directly assess anuran abundance and diversity at the Big Sand Mound Nature Preserve.

KEYWORDS: anurans, frogs, toads

ROOM: Embassy

TIME: Monday 3:40 PM

TITLE: Summary and results of the Milan Bottoms bald eagle night roost survey project

AUTHOR(S):

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ABSTRACT: Human development and activities continue to increase and encroach on the floodplain habitats of the Upper Mississippi River. For example, economic development is occurring immediately adjacent to the Milan Bottoms Complex in Rock Island County, Illinois. Evidence suggests that this area functions as a major night roost location for wintering Bald Eagles. Therefore we conducted a standardized night roost survey here during three consecutive winters (2005-2008), in order to document the importance of this site to wintering eagles. Each week, one evening and one morning survey were carried out from early December through late March (17 weeks). In 2005-2006, a total of 10,386 observations were recorded of eagles entering or exiting the night roost. Of these, 32% were adults, 36% were immatures, and 32% were unaged. In contrast, only 2,553 eagle observations were reported in 2006-2007, including 44% adults, 32% immatures, and 24% unaged. Eagle numbers increased in 2007-2008 to 6,957 observations. Among these, 39% were adults, 27% were immatures, and the remaining 34% were unaged. During the first three years of this project, the majority of night roosting eagle observations occurred in December and January, with steadily decreasing numbers in February and March, respectively. The upstream end of Milan Bottoms (i.e. the widest tract of floodplain forest habitat) appears to be the most heavily utilized portion of the study area for night roosting purposes.

KEYWORDS: eagle, night, roost

ROOM: Embassy

TIME: Monday 4:00 PM

TITLE: Assessment of amphibian community structure following flatwoods wetland habitat restoration

AUTHOR(S):

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ABSTRACT: Lake County Forest Preserve District implemented habitat restoration in MacArthur Woods, an Illinois State Nature Preserve. MacArthur Woods contains globally-imperiled flatwoods wetland habitat characterized by seasonal pools. MacArthur Woods was degraded by agricultural drainage tile and severe infestation of European buckthorn. Amphibian diversity was assessed in 1999, prior to restoration. Following a five-year restoration effort to disable drainage tile, remove buckthorn, and encourage regeneration of native species, I began post-restoration monitoring of MacArthur Woods amphibians in 2004. Monitoring continued through 2009, coupled with reintroduction efforts for three extirpated species: spotted salamanders, wood frogs, and spring peepers. I calculated species richness, evenness, diversity, and effective number of species for the amphibian assemblage for each year following restoration and compared amphibian community structure during the post-restoration period with pre-restoration data. I observed an increasing trend in amphibian richness, evenness, and diversity in the post-restoration years, independent of the reintroduced species. Changes in species dominance were observed for particular wetlands with dominance shifting among blue-spotted salamanders, western chorus frogs, and American toads. Increased presence of semi-permanent and permanent pool-breeding amphibians may indicate improved terrestrial habitat quality such that the site effectively serves as a corridor for interwetland migration. The successful recruitment of northern leopard frogs, late-breeding seasonal and semi-permanent pool breeders, in MacArthur Woods, indicated that hydrologic restoration has successfully increased pond-hydroperiod.

KEYWORDS: amphibian, restoration, wetland

ROOM: Embassy

TIME: Monday 4:20 PM

TITLE: Technological classification and evaluation updates to the Illinois Natural Areas Inventory

AUTHOR(S):

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ABSTRACT: The Illinois natural areas inventory (INAI) is an inventory of the states highest quality natural resources conducted for the purpose of long term protection, stewardship and defense. First completed in 1978, it contained 1,089 sites representing seven-hundredths of 1% of Illinois landscape. An update to the INAI is currently underway using improved technology, an expanded natural community classification and a systematic evaluation process. A custom programmed ArcGIS-Access database tool was created for data capture. Technological improvements may allow for greater mapping accuracy and data capture in the field but ultimately require more support and potentially a greater time commitment during time critical periods. The expansion of the classification system to include a woodland classification is meant to alleviate misinterpretations caused by the cultural connotation inherent in the term savanna which has complicated its usage within the INAI. Significant changes have been made to the INAI assessment methodology in the creation of a systematic and objective evaluation procedure to assist in the determination of natural quality. This evaluation procedure requires ranking four components for each grading patch. The components of species composition, vegetation structure, ecological process and physical environment are ranked based upon an assessment of sub-components which are themselves evaluated based upon the effect, extent and trend of specific quality indicators.

KEYWORDS: inventory, evaluation, technology